

Applicant : Kelley et al.
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Amendments to the Drawings:

The attached replacement sheet of drawings includes changes to Fig. 2 and replaces the original sheet including Fig. 2.

In Figure 2, the object identified by reference number 226 has been labeled heuristic modeler.

Attachments following last page of this Amendment:

Replacement Sheet (1 page)

REMARKS

Reconsideration and allowance of the above identified patent application are hereby requested. Claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are now in the application with claims 1, 53, 58, 59, 81, 91, and 103 being independent. Claims 1, 4, 6, 8, 12, 15, 21, 23, 27, 33, 34, 43, 48, 49, 53, 55, 58, 59, 81, 91, 92, 99, 100, 101, and 103-105 have been amended. Claims 3, 5, 7, 13, 54, 60, 65, 82, 86, and 102 have been canceled. No new matter has been added. The Office's rejections are respectfully traversed.

Objection to the Drawings

The drawings stand objected to because the Office asserts that reference numeral 226 appearing in Figure 2 should be labeled. Figure 2 has been amended to associate the label "Heuristic Modeler" with reference numeral 226, in accordance with the specification (para. 30). A replacement sheet containing the amended Figure 2 is attached. Accordingly, the objection to the drawings should be withdrawn.

Rejection Under 35 U.S.C. §112(2)

Claims 91-102 stand rejected under 35 U.S.C. §112, second paragraph, for the reasons set forth at pages 5-6 of the Action of January 3, 2007. The Office specifically identifies the terms "the communications devices" and "at least one user of a communications device" appearing in claim 91. Based on amendments to claim 91, these rejections have been overcome and should be

withdrawn. Further, the rejection of claims 92-102 has been overcome by the amendments to claim 91 and also should be withdrawn.

Rejection Under 35 U.S.C. §102

Claims 53, 56-57, 59, 61-65, 69-70, 72-79, 81, 83-93, and 96-97 stand rejected under 35 U.S.C. §102(a) and (e) as allegedly being anticipated by U.S. Patent No. 6,327,574 to Kramer et al. The Office's contentions are respectfully traversed.

CLAIM 53

Amended claim 53 recites (underlining added for emphasis) "...a mobile communications device operated by the user; a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device; a virtual database comprising at least one characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data; a search engine having access to a plurality of targeted messages and to said virtual database, wherein said search engine filters at least one of the targeted messages that is of interest to the user according to at least one of the at least one characteristics and one or more items of detected time and location data; and wherein said search engine communicates the at least one targeted message of interest to said mobile communications device for provision to the user."

Kramer et al. (Col. 5, lines 3-9) do not disclose a mobile device (underlining added for emphasis)...

The system 100 includes: A local access device 102 with local memory, computing capability, persistent storage, a display, and a network connection (e.g., a personal computer with a modem connected to an Internet Service Provider or an intelligent television set-top box connected to a cable head-end.)

Thus, Kramer et al. also do not disclose, teach, or suggest a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device.

Therefore, Kramer et al. also do not disclose, teach, or suggest a search engine having access to a plurality of targeted messages and to said virtual database, wherein said search engine filters at least one of the targeted messages that is of interest to the user according to at least one of the at least one characteristics and one or more items of detected time and location data, as is claimed.

For at least these reasons, amended claim 53 is allowable over Kramer et al. Claims 55-57 depend from claim 53. Therefore, dependent claims 55-57 are allowable for at least the reasons discussed with respect to claim 53.

CLAIM 59

Amended claim 59 similarly recites (underlining added for emphasis) “...monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device; building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device; modeling at least one probabilistic behavior of the user, in accordance with the virtual database; searching for

content targeted to the at least one modeled probabilistic behavior; and providing the content to the communications device.”

As discussed with respect to claim 53, Kramer et al. do not disclose monitoring time and location data corresponding to a mobile communications device. Thus, Kramer et al. also do not disclose, teach, or suggest building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device, as is claimed.

With respect to claim 65 (now canceled), the Office (Action of January 3, 2007 at page 9) asserts that Kramer et al. “teaches wherein the building comprises monitoring a time and location of the user (col. 6, ll.8-21).” The cited portion of Kramer et al., however, relates to extracting information associated with a transaction. For example, Kramer et al. (Col. 6, lines 12-21) disclose (underlining added for emphasis) “For a structured document such as a credit card report, interpretation extracts information about each transaction 202, such as the date/time 204 of the transaction,...the location 206 of the transaction,...” Extracting information describing transactions from a structured document is not equivalent to monitoring time and location data corresponding to a mobile communications device, as is claimed. The extracted information does not describe the time and location of a mobile communication device. Rather, a transaction indicates the location at which the transaction was processed, which can be a remote location.

For at least these reasons, amended claim 59 is allowable over Kramer et al. Claims 61-64 and 66-80 depend from claim 59. Therefore, dependent claims 61-64 and 66-80 are allowable for at least the reasons discussed with respect to claim 59.

CLAIM 81

Amended claim 81 recites (underlining added for emphasis) "...means for monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device; means for accepting a virtual database of information regarding a mobile communications device user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device; means for modeling at least one probabilistic behavior of the user, in accordance with the virtual database; means for selecting content targeted to the at least one modeled probabilistic behavior, wherein the appropriateness of the content is determined based on the current location of the mobile communications device; and means for providing the content to the mobile communications device."

As discussed above with respect to claim 53, Kramer et al. do not disclose monitoring time and location data corresponding to a mobile communications device. Thus, Kramer et al. also do not disclose, teach, or suggest a virtual database that includes one or more items of time and location data corresponding to the mobile communications device, as is claimed.

With respect to claim 86 (now canceled), the Office (Action of January 3, 2007 at page 12) asserts that Kramer et al. "teaches wherein the building comprises monitoring a time and location of the user (col. 6, ll.8-21)." As noted above in the discussion of claim 59, the cited portion of Kramer et al., however, relates to extracting transaction information from a structured document, such as the date/time of the transaction and the location of the transaction. Extracting

information describing transactions from a structured document is not equivalent to monitoring time and location data corresponding to a mobile communications device, as is claimed.

Further, claim 81 also recites (underlining added for emphasis) “wherein the appropriateness of the content is determined based on the current location of the mobile communications device....” Kramer et al. do not disclose determining the current location of the mobile communications device. Therefore, Kramer et al. also do not disclose, teach, or suggest determining the appropriateness of the content based on the current location of the mobile communications device.

For at least these reasons, amended claim 81 is allowable over Kramer et al. Claims 83-85 and 87-90 depend from claim 81. Therefore, dependent claims 83-85 and 87-90 are allowable for at least the reasons discussed with respect to claim 81.

CLAIM 91

Amended claim 91 recites (underlining added for emphasis) “...at least one network interface to at least one network; at least one device interface to at least one mobile communications device; a searching interface; a storage database comprising at least one actual user characteristic of the at least one user, at least one heuristic user characteristic of the at least one user, and one or more items of time and location data corresponding to the at least one mobile communications device; and a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database; wherein said controller generates the at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and

location data, and wherein said controller generates a search for the searching interface in accordance with the at least one heuristic user characteristic, the at least one actual user characteristic, and at least one of the one or more items of time and location data.”

As discussed above with respect to claim 53, Kramer et al. do not disclose a mobile communications device or a storage database comprising one or more items of time and location data corresponding to the at least one mobile communications device. Thus, Kramer et al. also do not disclose, teach, or suggest a controller that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and location data, as is claimed.

For at least these reasons, amended claim 91 is allowable over Kramer et al. Claims 92-101 depend from claim 91. Therefore, dependent claims 92-101 are allowable for at least the reasons discussed with respect to claim 91.

Rejection Under 35 U.S.C. §103

Claims 1-2, 5-17, 22-25, 27-28, 30-34, 41-52, 66-68, 71, 80, 95, and 98-101 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. Claims 18-21 and 35-40 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of U.S. Patent No. 5,761,662 to Dasan. Claim 29 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of U.S. Patent No. 6,327,574 to Agrawal et al. Claims 3-4, 54-55, 58, 60, 82, and 102-105 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of U.S. Patent No. 6,493,327 to Fingerhut. Claims 26 and 94 stand rejected under 35 U.S.C. §103(a) as allegedly

being unpatentable over Kramer et al. in view of U.S. Patent No. 6,869,018 to Filfield et al. The Office's contentions are respectfully traversed.

CLAIM 1

Amended claim 1 recites (underlining added for emphasis) "...at least one mobile communications device in communication with at least one network; a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device; a virtual database accessible to the at least one mobile communications device over the at least one network, wherein said virtual database comprises: a user profile including at least one actual user characteristic received over the at least one network; a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile; and a search engine that selects content to provide to the at least one mobile communications device over the at least one network, in accordance with said virtual database and the current time and the location of the mobile communications device."

As discussed above with respect to claim 53, Kramer et al. do not disclose a mobile communications device or a monitor that detects time and location data associated with the mobile communications device.

With respect to claim 7 (now canceled), the Office (Action of January 3, 2007 at page 17) asserts that Kramer et al. teach (underlining added for emphasis) "wherein the monitor comprises a time and location monitor (time and location information of the user is monitored via

structured documents, col. 6, ll. 8-21)". Amended claim 1 recites that the detected time and location data represent a current time and a location of the mobile communications device. As noted above in the discussion of claim 59, the cited portion of Kramer et al., however, relates to extracting transaction information from a structured document, such as the date/time of the transaction and the location of the transaction. Extracting information describing transactions from a structured document is not equivalent to a monitor that detects time and location data associated with a mobile communications device. Moreover, transaction information extracted from a structured document does not represent a current time and a location of a mobile communications device, as is claimed.

Because Kramer et al. do not disclose, teach, or suggest detecting time and location data representing a current time and the location of a mobile communications device, Kramer et al. also do not disclose, teach, or suggest a search engine that selects content to provide to the at least one mobile communications device over the at least one network, in accordance with said virtual database and the current time and the location of the mobile communications device, as is also claimed.

For at least these reasons, amended claim 1 is allowable over Kramer et al. Claims 2, 4, 6, 8-12, and 14-52 depend from claim 1. Therefore, dependent claims 2, 4, 6, 8-12, and 14-52 are allowable for at least the reasons discussed with respect to claim 1.

CLAIM 58

Amended claim 58 recites (underlining added for emphasis) "...a wireless communication device; a monitor that detects time and location data corresponding to the

wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device; at least one first database comprising actual information entered by a user of the wireless device; at least one second database comprising monitored information of behavior by the user of the wireless device wherein the at least one second database includes one or more items of detected time and location data; at least one heuristic database comprising heuristically estimated information on user behavior, wherein the heuristically estimated information is estimated in accordance with said at least one first database and said at least one second database; and a search engine that performs a search in accordance with at least one of said at least one first database, said at least one second database, and said at least one heuristic database, and that returns a result of the search to said wireless device.”

The Office (Action of January 3, 2007 at pages 38-39) acknowledges that Kramer et al. do not expressly disclose a wireless communication device. The Office (*Id.*), however, asserts that Fingerhut teaches a wireless communication device.

Nonetheless, Fingerhut does not disclose a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device. Fingerhut (Col. 3, lines 14-22) discloses determining which base station was used for wireless device registration (underlining added for emphasis):

Also in accordance with the present invention, the service provider (or other entity, such as a host, in collaboration with the service provider) can detect and monitor which base station was used for wireless device registration.

Accordingly, it is possible to determine (at least temporarily) where, geographically, the wireless device is located.

Thus, Fingerhut teaches determining the base station used for registration to indicate a geographic location of the wireless device. Fingerhut does not, however, disclose determining the geographic location of the wireless device after registration has been performed. Further, Fingerhut (Col. 6, lines 38-41) discloses that (underlining added for emphasis) ‘For example, during the OAA process according to the present invention, the user stays in the same geographical location from which the user sent the ARP 7 until the device 5 is activated which takes, for example two minutes.’ Thus, determining the geographic location of a wireless device based on a base station through which the wireless device was registered is not equivalent to a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device, as is claimed.

Further, neither Kramer et al. nor Fingerhut, taken separately or in combination, disclose, teach, or suggest an heuristic database comprising heuristically estimated information on user behavior, wherein the heuristically estimated information is estimated in accordance with said at least one first database and said at least one second database, which includes one or more items of detected time and location data, as is claimed.

For at least these reasons, amended claim 58 is allowable over the proposed combination of Kramer et al. and Fingerhut.

CLAIM 103

Amended claim 103 recites (underlining added for emphasis) “...a first data bank of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device; a comparator communicatively connected to said first data bank; a second data bank of objective characteristics communicatively connected to said comparator, wherein the objective characteristics are compared to the user characteristics by said comparator for a probabilistic message target; an available content data bank including available content; a content filter communicatively connected to said comparator and to said available content data bank, wherein the content filter accesses the available content, and filters the available content in accordance with the probabilistic message target output from said comparator; wherein the filtered available content is displayed to the user on the wireless communications device; and a query engine that transmits a message to assess a level of interest of the user in the filtered available content.”

The Office (Action of January 3, 2007 at pages 38-39) acknowledges that Kramer et al. do not disclose a wireless communication device. Thus, Kramer et al. also do not disclose a time and location monitor that monitors a current location of the wireless communications device.

The Office (*Id.*), however, asserts that Fingerhut teaches a wireless communication device. As similarly discussed with respect to claim 58, however, Fingerhut also does not disclose a time and location monitor that monitors a current location of the wireless communications device, as is claimed.

Further, neither Kramer et al. nor Fingerhut, taken separately or in combination, disclose a query engine that transmits a message to assess a level of interest of the user in the filtered

available content. Kramer et al. (Col. 32, line 66 to Col. 33, line 8) disclose using hierarchical discrimination of content to assess a user's level of interest, stating (underlining added for emphasis)...

When the consumer clicks on the content item 1408 ("Top 20 List of best selling books for your child"), the merchant's server receives an explicit request for children's books. This request is then used to select a more specific set of potential illuminations to send to the consumer's computer. In effect, the merchant is now aware of the consumer's interest in children's books (as this information has been volunteered by the consumer when he clicked on the content item 1408), but still does not know which sub-category of children is appropriate.

Thus, Kramer et al. teach using an iterative or hierarchical process to evaluate a user's level of interest in content. Hierarchical discrimination of content, however, is not equivalent to querying a user to assess a level of interest. A consumer clicking on a content item is not dispositive of the user's level of interest.

Further, Fingerhut (Col. 3, lines 39-44) discloses delivering targeted information to a wireless device:

It is still another object of the present invention to detect the node or base station via which a wireless device has registered and thereafter deliver targeted information and/or advertising to that wireless device via that node using a unique network address assigned to the wireless device or using only the wireless device's generic network address.

However, Fingerhut does not disclose any mechanism for assessing the recipient's level of interest in the targeted information. Therefore, the proposed combination of Kramer et al. and Fingerhut also fails to disclose, teach, or suggest a query engine that transmits a message to assess a level of interest of the user in the filtered available content, as is claimed.

Concluding Comments

The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly contested. Accordingly, the above arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of that claim or other claims.

In view of the above remarks, claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 should be in condition for allowance, and a formal notice of allowance is respectfully requested. Please apply the fee of \$1,020 for a three-month extension of time and any other applicable charges or credits to deposit account 06-1050.

Respectfully submitted,



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